

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) An antagonist that inhibits angiogenesis by modifying protein-protein interactions between matrix metalloproteinase 9 (MMP-9) and a β 1-containing integrin, wherein said antagonist comprises an antibody reagent which specifically binds to a polypeptide consisting of the sequence of SEQ ID NO: 1.
- 2 - 4. (Canceled)
5. (Previously presented) The antagonist of claim 1 wherein the protein-protein interactions cause MMP-9 to bind to the β 1-containing integrin.
6. (Previously presented) The antagonist of claim 1 wherein the β 1-containing integrin is α 5 β 1 integrin.
7. (Canceled)
8. (Previously presented) The antagonist of claim 1 wherein the protein-protein interactions cause co-localization of matrix metalloproteinase 9 (MMP-9) and a β 1-containing integrin on a cell surface or a blood vessel.
9. (Original) The antagonist of claim 1 wherein said antagonist inhibits angiogenesis.
10. (Original) The antagonist of claim 1 wherein said antagonist inhibits tumor growth.

11. (Original) The antagonist of claim 1 wherein said antagonist inhibits metastasis.

12. (Original) The antagonist of claim 1 wherein said antagonist inhibits a disease state.

13. (Original) The antagonist of claim 12 wherein the disease is psoriasis, macular degeneration, a neurological disease, or restenosis in a tissue.

14. (Original) The antagonist of claim 1 wherein said antagonist is a monoclonal antibody.

15. (Canceled)

16. (Previously presented) An antagonist that inhibits angiogenesis by modifying protein-protein interactions, wherein said antagonist comprises an antibody reagent which specifically binds to a polypeptide consisting of the sequence of SEQ ID NO: 1.

17. (Original) The antagonist of claim 1 wherein the antagonist is a polyclonal antibody.

18-21. (Cancelled)

22. (Original) The antagonist of claim 1 wherein the antagonist is a humanized or chemically modified monoclonal antibody.

23. (Original) The antagonist of claim 1 wherein the antagonist is a fragment of a monoclonal antibody.

24. (Original) The antagonist of claim 1 wherein the antagonist is conjugated to cytotoxic or cytostatic agents.

25 -106. (Cancelled)

107. (Previously presented) The antagonist of claim 14 wherein said monoclonal antibody is monoclonal antibody FM155.

108. (Previously presented) The antagonist of claim 16 wherein the antagonist is monoclonal antibody FM155.

109. (New) A method of inhibiting angiogenesis in a tissue comprising administering the antagonist of claim 1.

110. (New) The method of claim 109 wherein said antagonist is administered intravenously, transdermally, intrasynovially, intramuscularly, intratumorally, intraocularly, intranasally, intrathecally, or orally.

111. (New) The method of claim 109 wherein said antagonist is administered in conjunction with chemotherapy.

112. (New) The method of claim 109 wherein said antagonist is administered in conjunction with radiation.

113. (New) The method of claim 109 wherein the tissue is inflamed and angiogenesis is occurring.

114. (New) The method of claim 113 wherein the tissue is present in a mammal.

115. (New) The method of claim 114 wherein the tissue is arthritic, ocular, retinal or a hemangioma.

116. (New) A method of inhibiting tumor growth or metastasis in a tissue comprising administering the antagonist of claim 1.

117. (New) The method of claim 116 wherein said antagonist is administered intravenously, transdermally, intrasynovially, intramuscularly, intratumorally, intraocularly, intranasally, or orally.

118. (New) The method of claim 116 wherein said antagonist is administered in conjunction with chemotherapy.

119. (New) The method of claim 116 wherein said antagonist is administered in conjunction with radiation.

120. (New) The method of claim 116 wherein the tumor or metastasis is a melanoma, carcinoma, sarcoma, fibrosarcoma, glioma or astrocytoma.

121. (New) A method of inhibiting psoriasis, macular degeneration, or restenosis in a tissue by administering the antagonist of claim 1.

122. (New) The method of claim 121 wherein said antagonist is administered intravenously, transdermally, intrasynovially, intramuscularly, intratumorally, intraocularly, intranasally, intrathecally, or orally.

123. (New) The method of claim 121 wherein administering the antagonist is in conjunction with chemotherapy.

124. (New) The method of claim 121 wherein administering the antagonist is in conjunction with radiation.

125. (New) A method of detecting angiogenesis in a tissue by contacting the antagonist of claim 1 with said tissue.

126. (New) The method of claim 125 wherein said tissue is *ex vivo*.

127. (New) The method of claim 125 wherein said tissue is *in vivo* and said antagonist is administered intravenously, transdermally, intrasynovially,

intramuscularly, intratumorally, intraocularly, intranasally, intrathecally, or orally.

128. (New) The method of claim 125 wherein said antagonist is conjugated to a fluorochrome, radioactive tag, paramagnetic heavy metal, diagnostic dye or enzyme.

129. (New) A method of detecting tumors or tumor invasion in a tissue by administering the antagonist of claim 1.

130. (New) The method of claim 129 wherein said tissue is *ex vivo*.

131. (New) The method of claim 129 wherein said tissue is *in vivo* and said antagonist is administered intravenously, transdermally, intrasynovially, intramuscularly, intratumorally, intraocularly, intranasally, intrathecally, or orally.

132. (New) The method of claim 129 wherein said antagonist is conjugated to a fluorochrome, radioactive tag, paramagnetic heavy metal or diagnostic dye.